Information Systems—Why Data Management?

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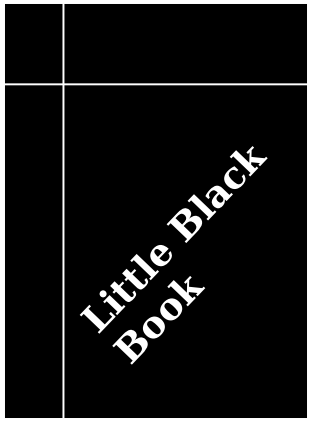
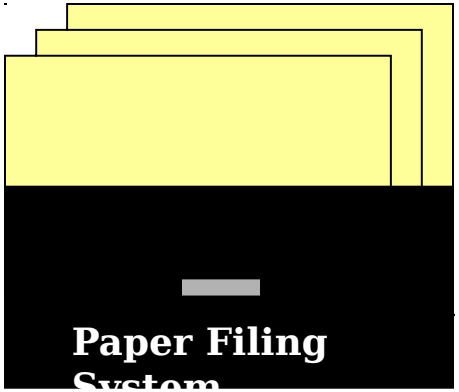
What is an Information System?





Spreadsheets

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What is an Information System?

High Tech Systems:

ORACLE

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Data vs. Knowledge

Data are pieces of information.

The organization of that data is…

Power

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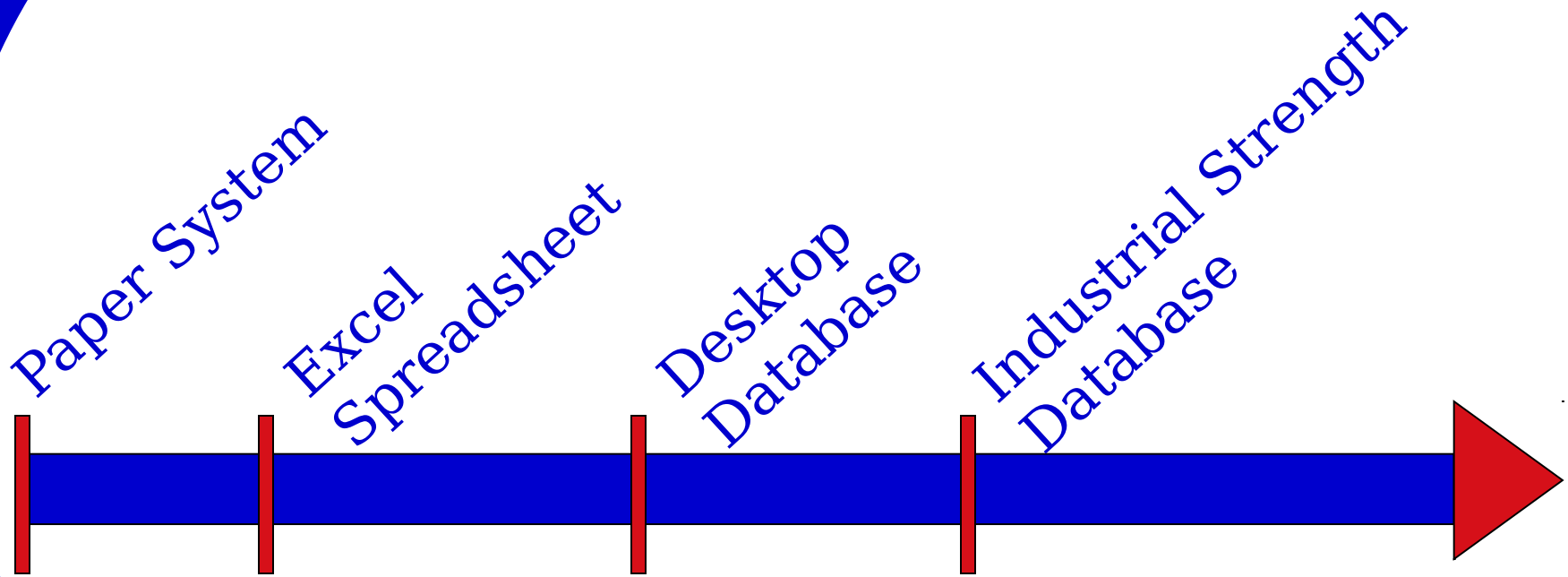
Typical Evolution of Data Management Systems



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Problems with No Industrial-Strength Solution:

- Data is only as accurate as the data entry
- Two months spent, on average, compiling the necessary data for the analysis
- Data has to be compiled to a central location and common system
- Data analysis and reporting mainly a manual function — nothing automatic
- Data often does not reflect follow-up activity, if any
- Anything without completed paperwork “fall through cracks”

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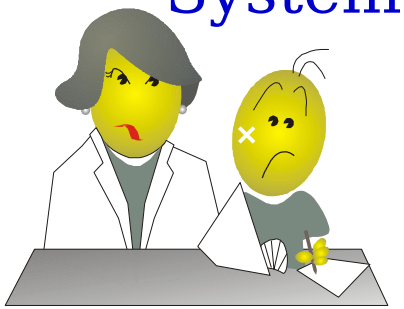
Sample Data Collection—No Data System



Fill out multiple papers with personal information. Hope it doesn't get lost.

Single person fills out all investigation data by hand and produces paper accident reports.

Statistics are gathered from many sources over a long period of time to create indicators.

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Collection of Information

- Complete — with all reporting areas included
- Available — when needed
- Analyzed — to reflect relevant statistics
- Organized — in such a way that it can be can read and understood quickly
- Allows for easy collection of data

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Technology’s Answer

Information Systems offering real-time data tracking, analysis and reporting.

How is this accomplished?

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Sample Data Collection—with Data System

Computer gets personal information automatically. Information recorded in database.

Many people supply the information they know. All data is recorded in a central file. Reports are generated with the push of a button.

Indicators and statistical analysis are produced instantaneously from data already collected. Real time, any time.

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Effective Use of Data

1. Record-keeping methodology must be unified throughout organization.

2. Records must be compiled into one system in
a timely fashion.

3. Data must be organized, analyzed and reported in such a way that it can be used as a decision-making tool.

4. Executives must feel comfortable with the data as a reliable resource for planning change.

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Data Tracking and Reporting

Database resides on server

Application on server and Web-based
(not on individual computers)

Multiple users can access simultaneously

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What Two Concepts Does an Enterprise-Wide System Promote?

- **OWNERSHIP**
- **ACCOUNTABILITY**

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The resulting information is an invaluable resource--a tool--but to work, it must be applied effectively.

- The technology and software will organize and report on the data as the first step.
- The reports will identify clear areas for improvements and indicate weaknesses — this information should initiate action.
- Then, implement those changes, involving the entire team.

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Questions and Conclusions

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